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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/995,715	12/22/1997	IVANOV ANATOLY GENNADIEVICH	0971/OD319	8165

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DARBY & DARBY
805 THIRD AVENUE
NEW YORK, NY 10022

EXAMINER

BRIER, JEFFERY A

ART UNIT	PAPER NUMBER
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2672

DATE MAILED: 07/01/2003

HL

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

08/995,715

Applicant(s)

GENNADIEVICH, IVANOV
ANATOLY

Examiner

Jeffery A. Brier

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04/04/03 & 05/06/03.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 48-50,52,55-61,63,67-69,71,73 and 75-79 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 48-50,52,55-61,63,67-69,71,73 and 75-79 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 04 April 2003 is: a) ☐ approved b) ☒ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

Response to Amendment

1. The substitute specification filed on 04/04/03 has been entered and the amended claims have been entered.

Drawings

2. This application was filed with incorrect drawings and applicant has attempted to submit drawings that do not enter new matter. This application did not incorporate by reference the foreign priority documents, thus, they cannot be used as the sole basis for drafting drawings for this application. It is noted that page 25 of the originally filed specification incorporated by reference all cited documents, however, the foreign priority documents were not cited in the specification, only in the declaration. Therefore, the specification as originally filed must be used to draft the drawings.

3. The proposed drawing correction filed on 04/04/03 has been disapproved because they introduce new matter into the drawings. 37 CFR 1.121(f) states that no amendment may introduce new matter into the disclosure of an application. The original disclosure does not support the showing of :

All references to the specification will be from the marked up copy filed on 04/04/03

Figure 1:

Pages 7-12 describes figure 1. Figure 1 shows the complementary screen 1 to be curved while the specification did not describe this. Figure 1 shows optical transmission cable 3 as being curved while the specification did not describe this. Figure 1 shows the BDS elements 6 as only partially covering the image plane 5 while

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the specification did not describe this. This arrangement will produce an image which has gaps between blocks.

Figure 1 fails to show how the block of raster elements from the complementary screen is sent to each of the BDS elements in a sequence as described in the originally filed specification at page 11 lines 17-19. The shown polarizer 4 could not direct a block of raster elements onto a corresponding BDS element. Nothing shown in figure 1 will allow the matrix of BDS elements to display a complete image in blocks in their proper places on the image plane 5.

Figures 2-3:

Pages 12-13 describes figures 2-3. Figure 3 appears to properly illustrate that which the specification describes. Figure 2 shows the orientation and shape of the acoustic optical deflector 12 while the specification did not describe the shown orientation and shape. Figure 2 shows the orientation and shape of the light conductor 3' while the specification did not describe the shown orientation and shape. Figure 2 shows the orientation of the focusing cone 11 while the specification did not describe the shown orientation. The shown shape of cone 11 would produce distorted raster elements. Figure 3 appears to properly illustrate that which the specification describes.

Figure 4(a):

Pages 15-16 describes figure 4(a). Figure 4(a) appears to properly illustrate that which the specification describes.

Figure 4(b):

Pages 16-17 describes figure 4(b). Figure 4(b) does not show how all the constituent blocks of the image plane are all scanned together in parallel nor the specification describe how this is performed, page 16 lines 10-11. Page 17 lines 5-7 describes the light direction is mostly perpendicular to the IMM plane presented by lens raster matrix where light 7, thus, light 7 impinging upon lens raster matrix 30 should be mostly perpendicular.

Figure 5:

Pages 13-14 describes figure 5. Figure 5 illustrates light beam 7 while the specification's description of figure 5 did not describe light beam 7 but rather described a non matrix collimated light beam while light beam 7 has been associated with the matrix light beam.

Figure 6:

Pages 17-20 describes figure 6. Figure 6 shows the orientation and shape of the light dividing matrix elements 18 while the specification did not describe the shown orientation and shape. Figure 6 shows lenses in the light focusing plane while the specification describes elements 23 as being holographic optic elements, not the shown lenses.

Specification

The disclosure is objected to because of the following informalities:

at line 14 in the next to last line "ny" should be by; and at page 16 Line 13 "17" should be 7. Appropriate correction is required.

Claim rejections- 35 USC 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 48-50, 52, 55-61, 63, 67-69, 71, 73, and 75-79 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 48 lines 2-4 is not supported by the specification because it claims generating one pixel from the two dimensional array of N pixels. While an array of N pixels in a two dimensional array would have to produce at least N pixels. Note at line 4 pixels is plural e.g. more than one, thus, the claim to generating one pixel from more than one pixel is not supported by the specification as filed. The same applies to claims 57 and 69.

Claim 49 is not supported by the specification because it claims a plurality of modulators for each block while the specification as filed did not describe this. Note page 16 lines 1-12 of substitute specification (page 17 lines 8-10 of marked up copy) which describes each BDS as having a light modulator.

Claim 48 at lines 11-12, claim 57 at lines 14-16, and claim 69 at lines 10-11 claim an array of modulators to independently modulate each of the raster elements of each

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of the P blocks. This is not supported by the specification for the reasons given for claim 49 above.

Claims 56, 60, 75 and 77 claim dots per inch while the specification as originally filed did not describe this.

Claim 68 claims the raster element is any one pixel. This is incorrect because a raster element corresponds to a specific location and a pixel corresponds to a specific location, thus, raster elements and pixels have a unique correspondence, thus, a raster element cannot be any one pixel.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 71 and 55 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 71 is indefinite because line 5 of this claim is referring to the M pixels of claim 48 or to a different M pixels. If it is referring to the M pixels of claim 48 it needs to be rewritten as said M pixels and if it is different than M needs to be changed to another letter. Dependent claim 55 has the same problem due to its dependency upon claim 71.

Response to Arguments

6. The argument at paragraph c is not persuasive because figure 2 shows output 3' at an angle to cone 11 thus the shape shown for cone 11 would produce distorted raster elements. The argument at paragraph d is not persuasive because nothing shown in figure 1 will allow the matrix of BDS elements to display a complete image in blocks in their proper places on the mage plane 5.

7. Applicant should note that without the array limitation in part (c) of claims 48, 57 and 69 the Furness patent of record would teach claims 48, 57 and 69 due to column 6 lines 51-57 and 61-67.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffery A. Brier whose telephone number is (703) 305-4723. The examiner can normally be reached on M-F from 6:30 to 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi, can be reached at (703) 305-4713).

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

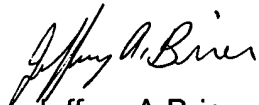
or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

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Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

A handwritten signature in black ink, appearing to read "Jeffery A. Brier".

Jeffery A Brier
Primary Examiner
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